

XC68HC711D3 DEVICE INFORMATION
(Rev. 4 - 5/2/91)
C45A Mask Set

The MC68HC711D3 microcontroller is an EPROM based M68HC11 family derivative.

A detailed Technical Data book for the MC68HC711D3 is available from your local Motorola representative. The following contains information and errata that pertains to C45A mask set devices.

USER INFORMATION:

The user can program the 4K EPROM using the M68HC711D3PGMR Programmer

Board or the M68HC711D3EVB Evaluation Board. Motorola sales offices and representatives have brochures describing these development tools.

Ceramic quad package users should note that coplanarity of the J-leads on this prototype package is relaxed to 10 mils due to additional handling. Plastic quad packages (PLCCs) continue to conform to our 4 mil spec.

ERRATA:

The STOP mode current on the C45A mask is higher than expected: we are limiting STOP mode current (SIDD) to 500A.

The CPU will not exit STOP mode correctly when interrupted by IRQ or XIRQ if the instruction immediately preceding STOP is a column 4 or 5 accumulator inherent (opcodes \$4X and \$5X) instruction, such as NEGA, NEGB, COMA, COMB, etc. These single byte, two cycle instructions must be followed by a NOP, then the STOP command. If reset is used to exit STOP mode, the CPU will respond correctly.

The RAM and registers should not be remapped into the EPROM space (\$F000 to \$FFFF) on this version of silicon. The EPROM is disabled in normal expanded mode on C45A mask devices.

Subsequent mask devices will have EPROM enabled at \$7000 to \$7FFF out of reset in normal expanded mode.

The following procedure details the correct sequence to perform byte programming of the 4K EPROM array if not using the Motorola developed programmer boards. The MC68HC711D3 Technical Data Manual (MC68HC711D3/D, Rev. 1) has a mistake in step 5.

Step Comments

1. Write \$20 to PPROG Set ELAT bit (PGM = 0) to enable EPROM latches
2. Write data to EPROM
3. Write \$21 to PPROG Set PGM bit (ELAT = 1) to enable EPROM high voltage
4. Delay 2 to 4 ms
5. Write \$00 to PPROG Turn off high voltage and EPROM latches, return to read mode
6. Repeat steps 1 thru 5 as needed

This document contains information on a new product. Specification and information herein are subject to change without notice.

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